Award I D: PP150025

Project Title:

Continuation and Expansion of Texas A&M's Colon Cancer Screening, Training, Education and Prevention Program

Award Mechanism:

Competitive Continuation/Expansion - Evidence-Based Cancer Prevention Services

Principal Investigator: McClellan, David

Entity:

Texas A&M University System Health Science Center

Lay Summary:

Need: Colorectal cancer (CRC) is the 2nd leading cause of cancer-related deaths in the US (Siegel et al., 2014) and in Texas (CPRIT, 2010). In Texas there will be an estimated 9,760 new CRC cases in 2014 (ACS, 2014). The Brazos Valley (BV), and its surrounding counties, have demonstrated high rates of CRC and a need for improved CRC screening, with 8 rural counties showing CRC mortality rates higher than the state average. Over 70% of the BV population (excluding Texas A&M) is over age 50; 12% of residents of this region are African American and 20% are Latino. Most of the counties are medically underserved and 20% of residents are uninsured. Just 4% qualify for Texas Medicaid, 15% are unemployed and 17% live below poverty level, with another 24.8% at near-poverty.

CRC incidence & mortality rates reflect racial disparities (CDC, 2013). In Texas, blacks have nearly 20% higher incidence and 14% higher mortality rates compared to white males; non-Hispanic black females have 15% higher incidence and 9% higher mortality rates compared to white females (Seigel et al., 2014b). Rural residents are more likely to develop CRC and die from it (Risser et al., 2010). Texas ranks low (41st) in CRC screening compared to other states (Seigel et al., 2014b). Also, blacks are less likely to have previous CRC screening compared to whites; Hispanics are less likely to have had screening compared to non-Hispanics (Siegel et al., 2014b).

In 2011, the Texas A&M Health Science Center (TAMHSC) received CPRIT award PP110176 to provide CRC screening in the BV, while training family practice physician residents to conduct colonoscopies. Through the grant, TAMHSC established the Cancer Screening, Training, Education & Prevention Program (C-STEP) which enhanced the ability of the Texas A&M Family Medicine Residency program to provide accessible CRC screenings to uninsured/underinsured persons. In its first 33 months, 1072 colonoscopies were completed as a result of C-STEP education/outreach; 75% at no cost to the patient. Sixty-three % of CPRIT-funded colonoscopies were received by African American or Hispanic individuals.

Specific Goals: Congruent with RFA P-15-CCE-1, this project proposes a continuation of services to the 7-county BV, while expanding access to C-STEP services in 10 additional

Texas counties. The goals of this application are to: a) increase the number of low-income, underserved and rural Texans who receive CRC screening (by up to 998 persons); b) improve access to CRC prevention education (reach more than 43,000 people & 1,950 professionals), and CRC screening/follow-up care, through use of community health workers/promotores (CHWs); and c) increase by 54 the pool of family medicine physicians receiving colonoscopy training.

Overall Project Strategy: In Houston & Trinity Counties, access to CRC screening and training will be accomplished with TAMHSC Clinical Preceptor Dr. J. Patrick Walker in Crockett, a training site for family medicine residents. Principal referral source for these counties will be Murray Community Clinic for the poor and uninsured. Nearly 1/4 of Houston County residents are African American; 20% live below poverty level. Both Houston & Trinity Counties are not currently served by a CPRIT prevention project.

We will also expand to the new Texas A&M Physicians Calvert Clinic (opening 07/2014) which has Falls, Limestone, and Freestone Counties in its service area. All 3 counties are without a dedicated CPRIT-funded prevention program. CHWs and project staff will conduct outreach and CRC education in parts of Lee and Milam counties. Lee, Milam, Falls and Limestone counties have CRC incidence rates higher than the state average; Milam/Falls/Limestone have CRC mortality rates higher than state average. Using a network of trained CHWs, our Texas C-STEP patient education services will be provided to overcome potential barriers such as fear, medical mistrust, or indifference about CRC screening.

We will also expand outreach to Waller County, where 54% are Hispanic or African American and 23% live in poverty. Expansion to 2 additional counties, Montgomery and Walker, has occurred naturally as the BV has moved into a 9-county Regional Heath Partnership that includes both counties.

Expansion of Texas C-STEP into the 10 counties as described, includes 7 counties not well served (0-1 project) by CPRIT according to the 12/2013 CPRIT prevention portfolio.

Significance and Impact: Colorectal cancer is a significant public health problem in Texas, especially in areas with significant poor & rural populations. This continuation/expansion project will allow the Texas A&M C-STEP program to serve 17 counties. Funding for this project will provide access to CRC screening for large numbers of underserved Texans in need of these services; offer CHW services to increase awareness and reduce barriers; and increase the number of family medicine physicians trained to conduct colonoscopy screenings.